

### **Listing of Claims**

The following listing of claims replaces all previous listings or versions thereof:

1. (Canceled)
2. (Currently amended) The method of claim 10~~bacterial host of claim 1~~, wherein said polypeptide is linked to a sequence encoding an adjuvant.
3. (Currently amended) The method of claim 10~~bacterial host of claim 2~~, wherein said adjuvant is selected from the group consisting of diphtheria toxoid, the T-cell epitope of tetanus toxin, cholera toxin, beta subunit of cholera toxin, and detoxified form of cholera toxin.
4. (Currently amended) The method of claim 10~~bacterial host of claim 1~~, wherein said sperm-specific polypeptide is lactate dehydrogenase-C or an antigenic fragment thereof.
5. (Currently amended) The method~~bacterial host~~ of claim 4, wherein said lactate dehydrogenase-C is a rodent lactate dehydrogenase-C.
6. (Currently amended) The method~~bacterial host~~ of claim 5, wherein said rodent lactate dehydrogenase-C is a rat lactate dehydrogenase-C or mouse lactate dehydrogenase-C.
7. (Currently amended) The method~~bacterial host~~ of claim 4, wherein said antigenic fragment is selected from the group consisting of SEQ ID NOs. 1-9.
8. (Currently amended) The method of claim 10~~bacterial host of claim 1~~, wherein said polypeptide is selected from the group consisting of SEQ ID NOs. 10-17.
9. (Currently amended) The method of claim 10~~bacterial host of claim 1~~, wherein said bacterial host is selected from the group consisting of *Salmonella typhimorium*, *Salmonella typhimorium*

strain SL3261, Salmonella typhimorium strain SL7202, Yersinia enterocolitica, Shigella flexner, Listeria monocytogenes, and Escherichia coli.

10. (Currently amended) A method of inducing an immune response against an egg- or sperm-specific polypeptide in decreasing the fertility of an animal, comprising the step of: allowing said animal to ingest ~~the bacterial host of claim 1a~~ a recombinant bacterial host useful as an immunocontraceptive vaccine, ~~said bacterial host comprising a vector encoding an egg- or sperm-specific polypeptide~~.
11. (Currently amended) The method of claim 10, wherein said animal is selected from the group consisting of mouse, rat, deer, elephants, water buffalo, feral horses, foxes, urban or wild dogs, urban or wild cats, or rabbits, ~~and other potentially overpopulated species causing economic damage to society~~.
12. (Original) The method of claim 10, wherein said bacterial host is freeze-dried or prepared as a bait formulation.
- 13.– 22. (Cancelled)
23. (New) The method of claim 10, wherein said immune response results in a decrease in fertility of the animal.